

of *P. sylvestris*, and planted them on the northern pent of the Lorbeerberg, near Charlottenbrunn, 1800 feet above the level of the sea. In the second year the plants made their appearance, of which, however, only one specimen of *P. Pumilio* succeeded. On the 9th of Sept. 1839, I visited this spot and found the plants in the following condition. The specimen of *P. Pumilio* is at its base one inch in diameter, bends down immediately at its exit from the soil with deflected convexity, and divides at a distance of two inches into two main branches, of which one is 12, the other 9 inches long. Each of these branches again divides 1 inch from their origin into 5 or 6 diverging branches of from 5 to 6 inches in length, which all lie extended on the earth. The numerous leaves are stiff, fasciculate, compressed, curvate, and shortened, just like those occurring on the highest elevations of the Riesengebirge. As yet no flowers have made their appearance. Now while this plant creeps on the soil, the neighbouring specimens of *P. sylvestris* which germinated at the same time have attained a perpendicular height of 10 to 13 feet, with a diameter of from $2\frac{1}{2}$ to $3\frac{1}{2}$ feet.—*Linnæa*, Part V. vol. xiii. 1839.

ON THE NESTS OF THE FIFTEEN-SPINED STICKLEBACK, OR *GASTER-OSTEUS SPINACHIA* OF LINNÆUS.

These nests are to be found in spring and summer on several parts of our coast, in rocky and weedy pools between tide marks. They occur occasionally near Berwick, but seem to be more common near Eyemouth and Coldingham. They are about eight inches in length, and of an elliptical form or pear-shaped, formed by matting together the branches of some common Fucus, as, for example, of the *Fucus nodosus*, with various confervæ, ulvæ, the smaller florideæ, and coralines. These are all tied together in one confused compact mass by means of a thread run through, and around, and amongst them in every conceivable direction. The thread is of great length, as fine as ordinary silk, tough and somewhat elastic; whitish, and formed of some albuminous secretion. The eggs are laid in the middle of this nest in several irregular masses of about an inch in diameter, each consisting of many hundred ova, which are of the size of ordinary shot, and of a whitish or amber colour according to their degree of maturity. The further advanced are marked with two round black spots, which are discovered by the microscope to be the eyes of the embryo, at this period disproportionally large and developed. Masses of eggs, in different stages of their evolution, are met with in the same nest. It is evident that the fish must first deposit its spawn amid the growing fucus, and afterwards gather its branches

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together around the eggs, weaving and incorporating at the same time all the rubbish that is lying or floating around the nucleus.

For the safety of its nest and spawn, the fish is apparently very anxious for a time. Some individuals were watched, by Mr. Duncan and the Rev. Mr. Turnbull, for some weeks, and it was observed that the same fish was always in attendance upon its own nest. During the time of hope and expectation, they become fearless, and will allow themselves to be taken up by the hand repeatedly. There can be no doubt that their object in remaining near the nest is to guard it against the attacks of such animals as might feel inclined to prey upon its contents.

NOTE.—Since the preceding notice was read to the Club, the second volume of Mr. Swainson's 'Natural History of Fishes,' &c. has been published; and I find that in it these nests are said to be constructed by the *Gobies*, on the authority of Olivi. The question is worth further inquiry; but on mentioning this statement of Olivi's to Mr. Maclaren of Coldingham, he assured me that he had seen and watched the stickleback in the act of making the nests we have just described. G. J.—*From the Transactions of the Berwickshire Naturalists' Club.*

ON *VESPERTILIO ÆDILIS*, JENYN'S.

In Wiegmann's Archiv, Part I. for 1840, we find, in a valuable paper by MM. Keyserling and Blasius "On the generic and specific character of the European Bats," the following notice on the above animal lately described by Mr. Jenyns as probably forming a new species:

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"1. *by its more acute snout.*—In dried specimens the snout is generally more acute than in fresh ones, and this affords therefore no ground for comparison.

"2. *by the form of the tragus.*—The incision at the apex is probably accidental and individual; we have found such incisions even to vary on both ears of one and the same individual. The tooth at the base exists in all, although in most cases overlooked, and affords no distinction.

"3. *by the hairy covering of the interfemoral membrane.*—The granules mentioned by Jenyns, upon which the hairs originate, are also to be seen on fresh, and less distinctly on dried, specimens of *V. Daubentonii*.

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